PERMIT BOOK

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 032006-009 Project Number: 2006-01-049

Owner: Meramec Group, Incorporated

Owner's Address: 338 Ramsey Street, Sullivan, MO 63080

Installation Name: Meramec Industries, Incorporated

Installation Address: 338 Ramsey Street, Sullivan, MO 63080

Location Information: Franklin County, S17, T40N, R2W

Application for Authority to Construct was made for:

Installation of a new molding operation. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

☐ Standard Conditions (on reverse) are applicable to this permit.

☑ Standard Conditions (on reverse) and Special Conditions (listed as attachments starting on page 2) are applicable to this permit.

MAR 13 2006

EFFECTIVE DATE

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional Office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed Special Conditions as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Meramec Industries, Incorporated
Franklin County, S17, T40N, R2W

1. Emission Limitation

   A. Meramec Industries, Incorporated shall emit less than 40 tons of Volatile Organic Compounds (VOCs) from the molding operation (Emission Points 29a, 29b, 29c) in any consecutive 12-month period.

   B. Attachment A or equivalent form approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1(A). Meramec Industries, Incorporated shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used in this equipment.

   C. Meramec Industries, Incorporated shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1(B) indicate that the source exceeds the limitation of Special Conditions Number 1(A).

   D. When considering using a paint in molding operation (Emission Points 29a, 29b, 29c) that is different to those listed in the Application for Authority to Construct, Meramec Industries, Inc. must calculate the potential emissions for each individual Hazardous Air Pollutant (HAP) in the alternative paint. If the potential HAP emissions for the alternative paint is equal to or greater than the 10 tons per year for each individual HAP or 25 tons per year for total HAPs, or if it is equal to or greater than the Screen Modeling Action Levels (SMAL) for any chemical listed in Attachment C, then Meramec Industries, Inc. must seek approval from the Air Pollution Control Program before use of the alternative paint.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

E. Attachment B or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrated compliance with Special Condition 1(C). Meramec Industries, Inc. shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used in the molding operation (Emission Points 29a, 29b, 29c).

2. Control Device
High efficiency filters (CD-29) must be in use at all times when the molding operation (Emission Point 29a, 29b, and 29c) is in operation and shall be operated and maintained in accordance with the manufacturer's specifications.

3. Operational Requirements
Meramec Industries, Inc. shall keep the paint solvents and cleaning solutions in sealed containers whenever the materials are not in use. Meramec Industries, Incorporated shall provide and maintain suitable, easily read, permanent markings on all paints, solvent and cleaning solution containers used with this equipment.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2006-01-049
Installation ID Number: 071-0068
Permit Number:

Meramec Industries, Incorporated
338 Ramsey Street
Sullivan, MO 63080

Complete: January 17, 2006
Reviewed: January 31, 2006

Parent Company:
Meramec Group, Incorporated
338 Ramsey Street
Sullivan, MO 63080

Franklin County, S17, T40N, R2W

REVIEW SUMMARY

- Meramec Industries, Incorporated has applied for authority to install a new molding operation.

- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment in insignificant amounts.

- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.

- The Maximum Achievable Control Technology (MACT) standard, 40 CFR Part 63, Subpart PPPP *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products* applies to this installation.

- High efficiency filters are being used to control the particulate matter less than 10 microns (PM_{10}) emissions from the equipment in this permit.

- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOCs are conditioned to de minimis levels.

- This installation is located in Franklin County, a nonattainment area for ozone (O_3) and an attainment area for all other criteria air pollutants.

- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

- Ambient air quality modeling was not performed since potential emissions of the application are conditioned to below de minimis levels.

- Emissions testing is not required for the equipment.

- Addition of the equipment in this permit qualifies as an off-permit change to your Part 70 Operating Permit.

- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Meramec Group owns and operates a polyurethane shoe sole manufacturing company, Meramec Industries Incorporated, in Sullivan, Missouri. There are nine (9) molding lines currently operating at the plant identified as Line 10, 11, 12, 14, 15, 17, 19, 21, and 22. The electrically heated molds are sprayed with a mold release compound to facilitate removing the finished product from the molds. Mixhead machines meter two (2) components (A and B) and pours them into the molds. Component A is an isocyanate prepolymer and component B is a polyurethane polyol mixture. Currently, both VOC and non-VOC blowing agent are also injected into the molds. After the mold is opened, the part or shoe sole is removed and trimmed and packed for shipment to the customer. Some of the shoe soles may be sent to the spray finishing area before shipment.

Meramec Group Incorporated obtained its Part 70 Operating Permit (Permit Number 2000-060) on May 18, 2000. The installation submitted a renewal to their Part 70 Operating Permit on December 17, 2004. The following construction permits have been issued to Meramec Group, Incorporated from the Air Pollution Control Program.

Table 1: Previously Issued Construction Permits

Permit Number	Description
0195-025	Installation of a shoe sole production line
0499-008	Installation of polyurethane shoe sole mold Line 12
052002-018	Installation of two (2) paint lines and equipment for a molding process line. This permit was a combination of two projects (Project Numbers 2002-02-019 and 2002-02-020)
072002-010	Modification to existing molding lines to include the usage of n-pentane as a blowing agent
042005-002	Modification to an existing painting operation
072002-010A	Correction of maximum hourly design rate of the sandblaster and abrasive cleaner.
062005-003	Installation of a new automated finishing operation
062005-003A	Amended recordkeeping requirements

Because of the close proximity in timing of the last two permits (042005-002 and 062005-003) with this current project, future projects within at least one (1) calendar year of issuance of this permit will be looked at closely for circumvention. Final determination for circumvention will be made on a case by case basis.

PROJECT DESCRIPTION

Meramec Group, Inc. is proposing to install a new molding operation in the Industrial Products Department at its facility in Sullivan, Missouri. The molding process starts with the line operator cleaning and preparing the mold. A robot will then spray the mold with a mold release compound followed by another robot which sprays the mold with an in-mold paint. The in-mold paint robot will have three spray guns with only one gun able to spray at any one time. Initially, black paint will be used; however, additional colors may be used in the future. The additional colors will have a composition similar to the black paint. The next step in the process is the injection of a urethane mixture containing a n-pentane blowing agent. From here, the part will be allowed to cure in the mold. The part is then removed from the mold by a line operator, the flash is trimmed, and the part is packaged.

The maximum hourly design rate (MHDR) for the mold release compound application robot (29a) and in-mold paint robot (29b) were determined using the flow rate of the gun (1.0 and 2.0 grams per second, respectively), the maximum density of the material (6.00 and 7.57 pounds per gallon, respectively), and the amount of time the robots are spraying per hour. The amount of time the robots are spraying per hour is the same for both robots and was calculated by taking the maximum amount of parts processed per hour (15 parts per hour) and multiplying it by the amount of spraying time required per part (30 seconds per part). The MHDR for the mold release is 0.17 gallons per hour and the MHDR for the in-mold paint is 0.26 gallons per hour.

The MHDR for the n-pentane usage (29c) was calculated using amount of n-pentane used per part and number of parts per hour (15 parts per hour). The amount of n-pentane used per part is based on the amount of foam used per part (15 pounds of foam used per part) multiplied by a ratio of 0.039 pounds of n-pentane used per pound of foam. The MHDR for n-pentane usage is 0.0044 tons per hour.

High efficiency filters (CD-29) are used to control PM_{10} emissions. The control efficiency of the filters is 98.6%.

EMISSIONS/CONTROLS EVALUATION

The pollutant of concern from the equipment of this project is VOC. A mass balance approach was used to determine the emissions from the mold release, in-mold paint, and the blowing agent used in the molding line. Material density and VOC and HAP content were determined from the Material Safety Data Sheets (MSDS). For the purpose of calculating potential emissions from this application, it is assumed that 100% of the VOCs and HAPs contained in the material are emitted.

The Existing Potential Emissions include conditioned potential emissions for VOCs and PM_{10} and were taken from Permit Number 062005-003. Existing actual emissions were taken from the installation's 2004 Emission Inventory Questionnaire (EIQ). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). The following table provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory *De Minimis* Levels	Existing Potential Emissions	Existing Actual Emissions (2004 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM_{10}	15.0	15.1	0.04	0.01	N/A
SOx	40.0	N/A	N/D	N/A	N/A
NOx	40.0	N/A	0.28	N/A	N/A
VOC	40.0	239	56.21	46.0	<40
CO	100.0	N/A	0.06	N/A	N/A
HAPs	10.0/25.0	14.1	0.59	0.4	N/A
Toluene	10.0	4.2	0.05	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOCs are conditioned to de minimis levels.

APPLICABLE REQUIREMENTS

Meramec Industries, Incorporated shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information,* 10 CSR 10-6.110
  The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions.

- *Operating Permits*, 10 CSR 10-6.065

- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170

- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220

- *Restriction of Emission of Odors*, 10 CSR 10-3.090

SPECIFIC REQUIREMENTS

- *Control of Emissions From Industrial Surface Coating Operations, 10 CSR 10-5.330*

- *Maximum Achievable Control Technology (MACT) Regulations*, 10 CSR 10-6.075, *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products,* 40 CFR Part 63, Subpart PPPP

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Susan Heckenkamp
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 17, 2006, received January 17, 2006, designating Meramec Group, Incorporated as the owner and operator of the installation.

- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

- Saint Louis Regional Office Site Survey, dated January 24, 2006.

Attachment A: Monthly VOC Tracking Record

Meramec Industries, Incorporated
For Emission Points 29a, 29b, 29c
Franklin County, S17, T40N, R2W
Project Number: 2006-01-049
Installation ID Number: 071-0068
Permit Number:

This sheet covers the month of _____ in the year _____.

Copy this sheet as needed.

Column 1	Column 2 (a)	Column 3	Column 4	Column 5
Material Used (Name, Type)	Amount of Material Used (Include Units)	Density (Pounds per Gallon)	VOC Content (Weight %)	VOC Emissions (Tons)

(b) Total VOC Emissions Calculated for this Month in Tons:	
(c) 12-Month VOC Emissions Total from Previous Month's Attachment A, in Tons:	
(d) Monthly VOC Emissions Total (b) from Previous Year's Attachment A, in Tons:	
(e) Current 12-month Total of VOC Emissions in Tons: [(b) + (c) - (d)]	

Instructions: Choose appropriate VOC calculation method for units reported:

(a) 1) If usage is in tons - [Column 2] x [Column 4] = [Column 5];
2) If usage is in pounds - [Column 2] x [Column 4] x [0.0005] = [Column 5];
3) If usage is in gallons - [Column 2] x [Column 3] x [Column 4] x [0.0005] = [Column 5].

(b) Summation of [Column 5] in Tons;

(c) 12-Month VOC emissions total (e) from last month's Attachment A, in Tons;

(d) Monthly VOC emissions total (b) from previous year's Attachment A, in Tons; and

(e) Calculate the new 12-month VOC emissions total. **A 12-Month VOC emissions total (e) of less than 40.0 tons for the installation indicates compliance**.

Attachment B – Hazardous Air Pollutants Calculation Sheet

Meramec Industries, Inc.
Emission Point 29
Franklin County, S17, T40N, R2W
Project Number: 2006-01-049
Installation ID Number: 071-0068
Permit Number:

This sheet covers the month of _____ in the year _____.
Copy this sheet as needed.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6 (a)	Column 7 (b)
Date	Material Used (Name, Type)	Application Rate (Gallons per hour)	Density (Pounds per gallon)	Individual HAP Content (Weight %)	Individual HAP Emissions (Tons per Year)	Screen Modeling Action Level (Tons per Year)
		0.26				
		0.26				
		0.26				
		0.26				
		0.26				
		0.26				
		0.26				
		0.26				
		0.26				
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		0.26				
		0.26				
		0.26				
		0.26				
		0.26				
		0.26				

Instructions: Calculate the potential emissions of each individual HAP contained in the material

(a) [Column 3] x [Column 4] x [Column 5] x [4.38] = [Column 6],

(b) Screen Modeling Action Levels for individual HAPs can be found in Attachment C.

(c) If [Column 6] is greater than [Column 7] or 10 tons per year, or if the total HAPs for the paint is greater than 25 tons per year, obtain permission from Air Pollution Control program before using this material.

Attachment C: Screen Modeling Action Levels

Chemical	CAS#	Emission Threshold Levels (tons/year)	Synonyms
Acetaldehyde	75-07-0	9	Acetic Aldehyde, Aldehyde, Ethanal, Ethyl Aldehyde
Acetamide	60-35-5	1	Acetic Acid Amide, Ethanamide
Acetonitrile	75-05-8	4	Methyl Cyanide, Ethanenitrile, Cyanomethane
Acetophenone	98-86-2	1	Acetylbenzene, Methyl Phenyl Ketone, Hypnone
Acetylaminofluorine, [2-]	53-96-3	0.005	N-2-Fluorenyl Acetaminde, N-Fluroen-2-yl Acetamide, 2-Acetamideofluorene
Acrolein	107-02-8	0.04	Acrylaldehyde, Acrylic Aldehyde, Allyl Aldehyde, Propenal
Acrylamide	79-06-1	0.02	Propenamide, Acrylic Amide, Acrylamide Monomer, Ethylenecarboxamide
Acrylic Acid	79-10-7	0.6	Propenoic Acid, Ethylene Carboxylic Acid, Vinylformic Acid
Acrylonitrile	107-13-1	0.3	Vinyl Cyanide, Cyanoethylene, Propenenitrile
Allyl Chloride	107-05-1	1	1-Chloro-2-Propene, 3-Chloropropylene, Chloroallylene, Alpha-Propylene
Aminobiphenyl, [4-]	92-67-1	1	Biphenyline, P -Phenylaniline, Xenylamine, 4-Aminodiphenyl, 4-Biphenylamine
Aniline	62-53-3	1	Aminobenzene, Phenylamine, Aniline Oil, Aminophen, Arylamine
Anisidine, [Ortho-]	90-04-0	1	O-Methoxyaniline
Antimony Compounds (except those specifically listed)		5	Antimony (Pentachloride, Tribromide, Trichloride, Trifluoride)
Antimony Pentafluoride	7783-70-2	0.1	
Antimony Potassium Tartrate	28300-74-5	1	
Antimony Trioxide	1309-64-4	1	
Antimony Trisulfide	1345-04-6	0.1	
Arsenic and Inorganic Arsenic Compounds		0.005	Arsenic (Diethyl, Disulfide, Pentoxide, Trichloride, Trioxide, Trisulfide), Arsinine, Arsenous Oxide
Benz(a)Anthracene	56-55-3	0.01	
Benz(c)acridine	225-51-4	0.01	
Benzene	71-43-2	2	Benzol, Phenyl Hydride, Coal Naphtha, Phene, Benxole, Cyclohexatriene
Benzidine	92-87-5	0.0003	4,4'-Biphenyldiamine, P-Diaminodiphenyl, 4,4'-Diaminobiphenyl, Benzidine Base
Benzo(a)pyrene	50-32-8	0.01	
Benzo(b)fluoranthene	205-992	0.01	
Benzotrichloride	98-07-7	0.006	Benzoic Trichloride, PhenylChloroform, Trichloromethylbenzene
Benzyl Chloride	100-44-7	0.1	Alpha-Chlorotoluene, Tolyl Chloride
Beryllium Compounds (except Beryllium Salts)		0.008	Beryllium (Acetate, Carbonate, Chloride, Fluoride, Hydroxide, Nitrate, Oxide)
Beryllium Salts		0.00002	
Bis(Chloroethyl)Ether	111-44-4	0.06	Dichloroethyl ether, Dichloroether, Dichloroethyl Oxide, BCEE
Bis(Chloromethyl)Ether	542-88-1	0.0003	BCME, Sym-Dichloromethyl ether, Dichloromethyl Ether, Oxybis-(Chloromethane)
Butadiene, [1,3-]	106-99-0	0.07	Biethylene, Bivinyl, Butadiene Monomer, Divinyl Erythrene, Vinylethylene

Butylene Oxide, [1,2-]	106-88-7	1	1,2-Epoxybutane, 1-Butene Oxide, 1,2-Butene Oxide, Butylene Oxide, Ethylethylene
Cadmium Compounds		0.01	Cadmium (Dust, Fume, Acetate, Chlorate, Chloride, Fluoride, Oxide, Sulfate, Sulfide)
Carbon Disulfide	75-15-0	1	Carbon Bisulfide, Dithiocarbonic Anhydride
Carbon Tetrachloride	56-23-5	1	Tetrachloromethane, Perchloromethane
Carbonyl Sulfide	463-58-1	5	Carbon Oxide Sulfide, Carbonoxysulfide
Catechol	120-80-9	5	Pyrocatechol, O-Dihydroxybenzene
Chloramben	133-90-4	1	3-Amino-2,5-Dichlorobenzoic Acid, Amben, Amiben*, Vegiben* (*Trademark)
Chlordane	57-74-9	0.01	ENT9932, Octachlor
Chlorine	7782-50-5	0.1	Bertholite
Chloroacetic Acid	79-11-8	0.1	Monochloroacetic Acid, Chloroethanoic Acid
Chloroacetophenone, [2-]	532-27-4	0.06	Phenacyl Chloride, Chloromethyl Phenyl Ketone, Tear Gas, Mace
Chlorobenzilate	510-15-6	0.4	Ethyl-4,4'-Dichlorobenzilate, Ethyl-4,4'-Dichlorophenyl Glycollate
Chloroform	67-66-3	0.9	Trichloromethane
Chloromethyl Methyl Ether	107-30-2	0.1	CMME, Methyl Chloromethyl Ether, Chloromethoxymethane, Monochloromethyl Ether
Chloroprene	126-99-8	1	2-Chloro-1,3-Butadiene, Chlorobutadiene, Neoprene Rubber Compound
Chromic Chloride	10025-73-7	0.1	
Chromium Compounds (except Hexavelent)		5	Chromium, Chromium(II) Compounds, Chromium (III) Compounds
Chromium Compounds, Hexavalent		0.002	Chromium (VI)
Chrysene	218-01-9	0.01	
Cobalt Carbonyl	12010-68-1	0.1	
Cobalt Metal (and compounds, except those specifically listed)		0.1	Cobalt (Bromide, Chloride, Diacetate, Formate, Nitrate, Oxide, Sulfamate)
Coke Oven Emissions	8007-45-2	0.03	Coal Tar, Coal Tar Pitch, Coal Tar Distillate
Cresol, [Meta-]	108-39-4	1	3-Cresol, M-Cresylic Acid, 1-Hydroxy-3-Methylbenzene, M-Hydroxytoluene
Cresol, [Ortho-]	95-48-7	1	2-Cresol, O-Cresylic Acid, 1-Hydroxy-2-Methylbenzene, 2-Methylphenol
Cresol, [Para-]	106-44-5	1	4-Cresol, P-Cresylic Acid, 1-Hydroxy-4-Methylbenzene, 4-Hydroxytoluene
Cresols/ Cresylic Acid (isomers and mixture)	1319-77-3	1	
Cyanide Compounds (except those specifically listed)	20-09-7	5	Cyanide (Barium, Chlorine, Free, Hydrogen, Potassium, Silver, Sodium, Zinc)
DDE (p,p'-Dichlorodiphenyl Dichloroethylene	72-55-9	0.01	
Di(2-Ethylhexyl)Phthalate, (DEHP)	117-81-7	5	Bis(2-ethylhexyl)Phthalate, Di(2-Ethylhexyl)Phthalate, DOP, Di-Sec-Octyl Phthalate
Diaminotoluene, [2,4-]	95-80-7	0.02	2,4-Toluene Diamine, 3-Amino-Para-Toluidine, 5-Amino-Ortho-Toluidine
Diazomethane	334-88-3	1	Azimethylene, Diazirine
Dibenz(a,h)anthracene	53-70-3		
Dibenzofuran	132-64-9	5	Diphenylene Oxide

Dibenzopyrene, [1,2:7,8]	189-55-9		
Dibromo-3-Chloropropane, [1,2-]	96-12-8	0.01	DBCP
Dibromomethane, [1,2-]	106-93-4	0.1	Ethylene Dibromide, Ethylene Bromide, Sym-Dibromoethane
Dichlorobenzene, [1,4-]	106-46-7	3	1,4-Dichloro-P-DCB, 1-4-DCB, PDB, PDCB
Dichlorobenzidene, [3,3-]	91-94-1	0.2	4,4'-Diamino-3,3'-Dichlorobiphenyl, 3,3'-Dichlorobiphenyl-4,4'-Diamine, DCB
Dichloroethane, [1,1-]	75-34-3	1	Ethylidene Dichloride, 1,1-Ethylidene Dichloride, Asymmetrical Dichlorethane
Dichloroethane, [1,2-]	107-06-2	0.8	Ethylene Dichloride, Glycol Dichloride, Ethylene Chloride
Dichloroethylene, [1,1-]	75-35-4	0.4	Vinylidene Chloride, DCE, VDC
Dichloropropane, [1,2-]	78-87-5	1	Propylene Dichloride
Dichloropropene [1,3-]	542-75-6	1	1,3-Dichloropropylene, Alpha-Chlorallyl Chloride
Dichlorvos	62-73-7	0.2	DDVP, 2,2-Dichlorvinyldimethylphosphate
Diethanolamine	11-42-2	5	Bis(2-Hydroxyethyl)Amine, 2,2'-Dihydroxydiethylamine, Di(2-Hydroxyethyl)Amine
Diethyl Sulfate	64-67-5	1	Diethyl Ester Sulfuric Acid, Ethyl Sulfate
Dimethoxybenzidine, [3,3-]	119-90-4	0.1	Fast Blue B Base, Dianisidine, O-Dianisidine
Dimethylbenz(a)anthracene, [7,12]	57-97-6	0.01	
Dimethyl Benzidine, [3,3-]	119-93-7	0.008	O-Tolidine, Bianisidine, 4,4'-Diamino-3,3'-Dimethylbiphenyl, Diaminoditoyl
Dimethyl Carbamoyl Chloride	79-44-7	0.02	DMCC, Chloroformic Acid Dimethyl Amide, Dimethyl Carbamyl Chloride
Dimethyl Formamide	68-12-2	1	DMF, Formyldimethylamine
Dimethyl Hydrazine, [1,1-]	57-14-7	0.008	Unsymmetrical Dimethylhydrazine, UDMH, Dimazine
Dimethyl Sulfate	77-78-1	0.1	Sulfuric Acid Dimethyl Ester, Methyl Sulfate
Dimethylaminoazobenzene, [4-]	60-11-7	1	N,N-Dimethyl-P-Phenylazo-Aniline, Benzeneazo Dimethylaniline
Dimethylaniline, [N,N-]	121-69-7	1	N,N-Diethyl Aniline, N,N-Dimethylphenylamine, DMA
Dinitro-O-Cresol, [4,6-] and salts	534-52-1	0.1	DNOC, 3,5-Dinitro-O-Cresol, 2-Methyl-4,6-Dinitrophenol
Dinitrophenol, [2,4-]	51-28-5	1	DNP
Dinitrotoluene, [2,4-]	121-14-2	0.02	Dinitrotoluol, DNT, 1-Methyl-2,4-Dinitrobenzene
Dioxane, [1,4-]	123-91-1	6	1,4-Diethyleneoxide, Diethylene Ether, P-Dioxane
Diphenylhydrazine, [1,2-]	122-66-7	0.09	Hydrazobenzene, N,N'-Diphenylhydrazine, N,N'-Bianiline, 1,1'-Hydrodibenzene
Diphenylmethane Diisocyanate, [4,4-]	101-68-8	0.1	Methylene Bis(Phenylisocyanate), Methylene Diphenyl Diisocycante, MDI
Epichlorohydrin	106-89-8	2	1-Chloro-2,3-Epoxypropane, EPI, Chloropropylene Oxide, Chloromethyloxirane
Ethyl Acrylate	140-88-5	1	Ethyl Propenoate, Acrylic Acid Ethyl Ester
Ethylene Imine (Aziridine)	151-56-4	0.003	Azacyclopropane, Dimethyleneimine, Ethylenimine, Vinylamine, Azirane
Ethylene Oxide	75-21-8	0.1	1,2-Epoxyethane, Oxirane, Dimethylene Oxide, Anprolene
Ethylene Thiourea	96-45-7	0.6	2-Imidazolidinethione, ETU
Fluomine	62207-76-5	0.1	
Formaldehyde	50-00-0	2	Oxymethylene, Formic Aldehyde, Methanal, Methylene Oxide, Oxomethane
Glycol Ethers (except those		5	

specifically listed)			
Heptachlor	76-44-8	0.02	1,4,5,6,7,8,8A-Heptachloro-3A,4,7,7A-Tetrahydro-4,7-Methanoindiene
Hexachlorobenzene	118-74-1	0.01	Perchlorobenzene, HCB, Pentachlorophenyl Benzene, Phenyl Perchloryl
Hexachlorobutadiene	87-68-3	0.9	Perchlorobutadiene, 1,3-Hexachlorobutadiene, HCB
Hexachlorocyclopentadiene	77-47-4	0.1	HCCPD, HEX
Hexachloroethane	67-72-1	5	Perchloroethane, Carbon Hexachloride, HCE, 1,1,1,2,2,2-Hexachloroethane
Hexamethylene Diisocyanate, 1,6-	822-06-0	0.02	1,6-Diisocyanatohexane, 1,6-Hexanediol Diisocyanate
Hexamethylphosphoramide	680-31-9	0.01	Hexamethylphosphoric Triamide, HEMPA, Hexametapol, Hexamethylphophoramide
Hydrazine	302-01-2	0.004	Methylhydrazine, Diamide, Diamine, Hydrazine Base
Hydrogen Fluoride	7664-39-3	0.1	Hydrofluoric Acid Gas, Fluorhydric Acid Gas, Anhydrous Hydrofluoric Acid
Hydrogen Selenide	7783-07-5	0.1	
Hydroquinone	123-31-9	1	Quinol, Hydroquinol, P-Diphenol, 1,4-Benzenediol, Hydrochinone, Arctuvin
Indeno(1,2,3-cd)Pyrene	193-39-5	0.01	
Lead and Compounds (except those specifically listed)	20-11-1	0.01	Lead (Acetate, Arsenate, Chloride, Fluoride, Iodide, Nitrate, Sulfate, Sulfide)
Lindane [Gamma-Hexachlorocyclohexane]	58-89-9	0.01	Benzene Hexachloride – Gamma Isomer
Maleic Anhydride	108-31-6	1	2,5-Furanediene, Cis-Butenedioic Anhydride, Toxilic Anhydride
Manganese and Compounds (except those specifically listed)	20-12-2	0.8	Manganese (Acetate, Chloride, Dioxide, (II)-Oxide, (III)-Oxide, (II)-Sulfate
Mercury Compounds (except those specifically listed)	20-13-3	0.01	Mercury Compounds (Methyl-, Ethyl-, Phenyl-)
Mercury Compounds (Inorganic)	20-13-3	0.01	Mercury (Chloride, Cyanide, (I,II)-[Bromide, Iodide, Nitrate, Sulfate], Oxide)
Methyl Hydrazine	60-34-4	0.06	Monomethylhydrazine, Hydrozomethane, 1-Methylhydrazine
Methyl Iodide	74-88-4	1	Idomethane
Methyl Isocyanate	624-83-9	0.1	Isocyanatomethane,Isocyanic Acid, Methyl Ester
Methylcyclopentadienyl Manganese	12108-13-3	0.1	
Methylene Bis(2-Chloroaniline), [4,4-]	101-14-4	0.2	Curene, MOCA, 4,4'-Diamino-3,3'-Dichlorodiphenylmethane
Methylenedianiline, [4,4-]	101-77-9	1	4,4'-Diaminodipheylmethane, DDM, MDA, Bis(4-Aminophenyl)Methane, DAPM
Nickel Carbonyl	13463-39-3	0.1	
Nickel Compounds (except those specifically listed)		1	Nickel (Acetate, Ammonium Sulfate, Chloride, Hydroxide, Nitrate, Oxide, Sulfate)
Nickel Refinery Dust	12035-72-2	0.08	
Nickel Subsulfide		0.04	
Nitrobenzene	98-95-3	1	Nitrobenzoil, Oil of Mirbane, Oil of Bitter Almonds
Nitrobiphenyl, [4-]	92-93-3	1	4-Nitrodiphenyl, P-Nitrobiphenyl, P-Nitrophenyl, PNB
Nitrophenol, [4-]	100-02-7	5	4-Hydroxynitrobenzene, Para-Nitrophenol

Nitropropane, [2-]	79-46-9	1	Dimethylnitromethane, Sec-Nitropropane, Isonitropropane, Nitroisopropane
Nitroso-N-Methylurea, [N-]	684-93-5	0.0002	N-Methyl-N-Nitrosourea, N-Nitroso-N-Methylcarbamide
Nitrosodimethylamine, [N-]	62-75-9	0.001	Dimethylnitrosamine, DMN, DMNA
Nitrosomorpholine, [N-]	59-89-2	1	4-Nitrosomorpholine
Parathion	56-38-2	0.1	DNTP, Monothiophosphate, Diethyl-P-Nitrophenyl
PCB (Polychlorinated Biphenyls)	1336-36-3	0.009	Aroclors
Pentachloronitrobenzene	82-68-8	0.3	Quintobenzene, PCNB, Quiniozene
Pentachlorophenol	87-86-5	0.7	PCP, Penchlorol, Pentachlorophenate, 2,3,4,5,6-Pentachlorophenol
Phenol	108-95-2	0.1	Carbolic Acid, Phenic Acid, Phenylic Acid, Phenyl Hydrate, Hydroxybenezene
Phenyl Mercuric Acetate	62-38-4	0.01	
Phosgene	75-44-5	0.1	Carbonyl Chloride, Carbon Oxychloride, Carbonic Acid Dichloride
Phosphine	7803-51-2	5	Hydrogen Phosphide, Phosphoretted Hydrogen, Phosphorus Trihydride
Phosphorous (Yellow or White)	7723-14-0	0.1	
Phthalic Anhydride	85-44-9	5	Phthalic Acid Anhydride, Benzene-O-Dicarboxylic Acid Anhydride, Phthalandione
Polycyclic Organic Matter (except those specifically listed)	TP15	0.01	POM, PAH, Polyaromatic Hydrocarbons,
Potassium Cyanide	151508	0.1	
Propane Sultone, [1,3-]	1120-71-4	0.03	1,2-Oxathiolane-2,2-Dioxide, 3-Hydroxy-1-Propanesulphonic Acid Sultone
Propiolactone, [Beta-]	57-57-8	0.1	2-Oxeatanone, Propiolactone, BPL, 3-Hydroxy-B-Lactone-Propanoic Acid
Propionaldehyde	123-38-6	5	Propanal, Propyl Aldehyde, Propionic Aldehyde
Propylene Oxide	75-56-9	5	1,2-Epoxypropane, Methylethylene Oxide, Methyl Oxirane, Propene Oxide
Propyleneimine, [1,2-]	75-55-8	0.003	2-Methyl Aziridine, 2-Methylazacyclopropane, Methylethyleneimine
Quinoline	91-22-5	0.006	1-Azanaphthalene, 1-Benzazine, Benzo(B)Pyridine, Chinoleine, Leucoline
Quinone	016-51-4	5	Benzoquinone, Chinone, P-Benzoquinone, 1,4-Benzooquinone
Selenium and Compounds (except those specifically listed)	7782-49-2	0.1	Selenium (Metal, Dioxide, Disulfide, Hexafluoride, Monosulfide)
Sodium Cyanide	143339	0.1	
Sodium Selenate	13410010	0.1	
Sodium Selenite	101020188	0.1	
Styrene	100-42-5	1	Cinnamene, Cinnamol, Phenethylene, Phenylethylene, Vinylbenzene
Styrene Oxide	96-09-3	1	Epoxyethylbenzene, Phenylethylene Oxide, Phenyl Oxirane, Epoxystyrene
Tetrachlorodibenzo-P-Dioxin	1746-01-6	6.00E-07	
Tetrachloroethane, [1,1,2,2-]	79-34-5	0.3	Sym-Tetachloroethane, Acetylene Tetrachloride, Ethane Tetrachloride
Tetraethyl Lead	78-00-2	0.01	
Tetramethyl Lead	75-74-1	0.01	
Titanium Tetrachloride	7550-45-0	0.1	Titranium Chloride
Toluene Diisocyanate, [2,4-]	584-84-9	0.1	TDI, Tolylene Diisocyante, Diisocyanatoluene
Toluidine, [Ortho-]	95-53-4	4	Ortho-Aminotoluene, Ortho-Methylaniline, 1-Methyl-1,2-Aminobenzene
Toxaphene	8001-35-2	0.01	Chlorinated Camphene, Camphechlor, Polychlorcamphene

Trichloroethane, [1,1,2-]	79-00-5	1	Vinyl Trichloride, Beta-Trichloroethane
Trichlorophenol, [2,4,5-]	95-95-4	1	2,4,5-TCP
Trichlorophenol, [2,4,6-]	88-06-2	6	2,4,6-TCP
Trifluralin	1582-09-8	9	2,6-Dinitro-N-N-Dipropyl-4-(Trifluoromethyl)Benzeneamine
Trimethylpentane, [2,2,4-]	540-84-1	5	Isobutyltrimethylethane, Isoctane
Urethane [Ethyl Carbamate]	51-79-6	0.8	Ethyl Urethane, O-Ethylurethane, Leucothane, NSC 746, Urethan
Vinyl Acetate	108-05-4	1	Acetic Acid Vinyl Ester, Vinyl Acetate Monomer, Ethenyl Ethanoate
Vinyl Bromide	593-60-2	0.6	Bromoethylene, Bromoethene
Vinyl Chloride	75-01-4	0.2	Chloroethylene, Chloroethene, Monochloroethylene